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Modeling The Quality & Reliability Dependent Customer Satisfaction in Healthcare

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Abstract— the importance of Customer Satisfaction is quite evident to any business or organization mainly because it plays a vital role in any industry. But unfortunately when it comes to health care and more specifically, hospitals, clinics and health systems, enormous rate of failure related to quality and reliability of services which is consequently followed by customer dissatisfaction is reported. And that's because hospital "customers" are very different than those in any other industry for one important reason, they don't want to be there. This paper aims to investigate the failure data related to Customer Satisfaction on account of quality and reliability. Number of failures and severity were used to model the quality related satisfaction, while reliability related satisfaction is modeled based upon number of visits to hospital (including its clinic), delays before receiving treatments and time interval between visits. Eventually the model is constructed on basis of quality and reliability related satisfaction values.

Keywords- *Quality, Reliability, Customer Satisfaction, Health care*

I. INTRODUCTION

Customers are as the matter of fact the true bosses of any Business or Organization. With this concept in mind, firms came to conclusion that if they don't win the satisfaction of their customer, they will lose them to their competitors sooner or later. As a result, there has been dramatic increase in improving the customer and customer satisfaction related performance and processes. In this regards, companies try to gather information about customer satisfaction by launching and conducting customer satisfaction surveys. These surveys generally try to measure the subjective experience of customer with a product or a service. That means the output is an attitudinal reaction to perception of service; and is in fact a subjective evaluation rather than an objective measure which is based upon cognition and affected by emotions, values, beliefs and expectations. In spite of the fact that

many critics believe that these surveys do not reflect the real thoughts and feelings of customer's experience, this method is yet the best and most applied technique for measuring, assessing and analyzing the customer satisfaction.

The controversial fact in health care, within past few decades, is that the customer satisfaction and related methodologies such as CRM were taken as a luxury rather than necessity for an organization but gradually according to the failure data, firms have realized that patient's perception is exactly in contrary to their beliefs. In the long run and after all tardiness, customer satisfaction techniques were applied to improve the quality and reliability of offered services. In recent years interest in measuring satisfaction with healthcare has considerably grown. The argument is that business approaches like general customer satisfaction methodologies neglect the important aspects which are unique to health care. Because of restricted health care resources and permanent rising expectations of patients, it's important to provide and supply cost effective technologies and treatments. Patient perception is one of the most important factors in assessment of performance in this domain.

II. RELATED WORK

Several different models have been developed to conceptualize and define the quality from customer's viewpoint and in terms of customer satisfaction. On the other hand, several approaches have been used to identify the contributing factors related to satisfaction with health care. However the fact is that very restricted and limited scientific based literatures have been published to demonstrate the quantification of customer satisfaction. Only few works has mainly concentrated on assessment of customer satisfaction in healthcare. But reliability assessment of services in healthcare sector is further